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INTRODUCTION TO SPECULATIVE LOGIC AND PHILOSOPHY.

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CHAPTER II.

§ 1. *Formal Logic abstractly considered.*

But, whatever be Aristotle's conception of Logic, the question must be decided on its own merits, and independent of all extraneous argument and historical antecedent. We will, therefore, examine the logical theories first in themselves and abstractly considered, and then in some of their most important applications.

And to begin with Terms, we must ask what they are, and what is the precise meaning attached to them. If they are anything, they are only Ideas, as it will be shown in the course of this inquiry. But formal Logic excludes Ideas from its province, and removes all questions relating to Ideas either to Psychology or Metaphysics. We must then inquire what they are, and what they can be if they are not Ideas. Now the only thing which is left for them to be is to express either certain *qualities* or certain *quantities*, or *genera* and *species*. But, according to formal Logic, Terms and their relations, or rules, as they are called, cannot be *qualities*; for, as qualities belong to the nature of things and constitute a part of it, this would bring Logic on the ground of Ontology. Thus, for instance, the logical element would become a quality of *man*, of *being*, of *mortal*, &c. If terms are not *qualities*, are they *genera* and *species*? If so, they cannot be genera and species, such as the latter exist in nature, or such as we can conceive them to be, namely, endowed with the power of generation, or other kindred, real qualities; for they would cease thereby to be logical elements. If, then, they are genera and species, they are genera and species of another and peculiar kind. They are, and can only be, *quantities* of different magnitude, connected, as all quantities are, by the relation of *more* or *less*; or, as we have already stated, of two quantities, one of which is contained in the other.—A, B, C, D, &c., if they represent neither *Being* (*Ens*) nor *Quality*, must represent *Quantity*, unless they are = 0. Thus formal

Logic is, as we have already stated, the *Logic of Quantity*. But the science of Quantity is Mathematics, and thus either Logic would be a part of Mathematics, or Mathematics a part of Logic, or Logic and Mathematics would be one and the same science under different names. This is the point where the two sciences meet, and which has led some to consider them as one and the same science, or to borrow from Mathematics the method for philosophical inquiries, and consider it as the absolute method of knowledge. In fact, if A, B, C, D, &c., are mere quantities, they are numbers, or numerical symbols, and their relation is of a quantitative kind. Thus B, *genus*, will contain A, *species*, as 2 contains 1; and C, being a *genus* with reference to B, will contain B which is become a *species*, as 3 contains 2, &c. And if we apply the same criterion to syllogism, we shall arrive at the same result. Suppose A, B, C to be the three terms of a syllogism; suppose A to be the major, C the minor extreme, and B the middle term. According to the fundamental principle of the syllogistic theory, B is a middle term because it is so constituted as to contain C, and to be contained in A. Now, this is nothing else than a numerical proportion; that is to say, C is in B as B is in A, or $2 : 4 :: 4 : 8$. What prevents the student from perceiving the identity of the two formulas is either that the principle is represented in logical treatises by letters, to which no precise definition is attached, or that when the principle is enunciated by words, as in the following formulas, "*that what belongs to the whole must belong also to the part of this same whole*," or "*what belongs to the genus must belong also to the species of this same genus*"; here, too, what is meant by *whole* and *part*, by *genus* and *species*, is left in the dark. Had these terms been carefully analyzed and their possible meaning inquired into, it would have been perceived that they can only represent quantities and numbers. But what conceals the inanity of the rule is, above all, the example attached to it. For as the example is borrowed from concrete and real objects, one is led to think that the rule is embodied in the example. However, such is not the case. For if you strip the terms of all quality, i.e. of what does not belong to the province of Logic, the only thing, the only entity and reality left, will be this quantity. Thus

when the example,

All men are mortal.
 Europeans are men :
 Therefore, &c.

is quoted, one thinks that he has to do with something rational and some reality. But it ought to be borne in mind that formal Logic does not in any way concern itself with the reality of things, so that whether *man*, *mortal*, *European*, &c., exist either separately or conjointly, whether they possess such and such a quality or not, these are matters excluded from its province; and the only point left to its investigation is that *if these terms or things exist, if they possess such and such a quality and relation, they may be combined according to certain laws or rules of quantity*.

In order to place the matter beyond doubt, let us analyze the above example.

In the theory of Proposition it is taught, that in the *universal affirmative proposition the attribute is taken particularly*, or distributed; i.e. such a part of the attribute is taken as belongs to the subject. In fact, the attribute being a *Genus*, and the *Genus* containing several *species* or *parts*, the only part of the *genus* that can be taken is that which belongs to the corresponding species. Thus in the proposition, "All men are mortal," *mortal* being taken *particularly*, we have only a part of *mortal*, the part belonging to *all men*, or to *man*; i.e. we have two species, or two equal quantities, $4=4$. Now, what takes place in the *propositio major* takes place also in the *propositio minor*. Here the middle term, which was the *subject*, or *species*, in the *major*, becomes *attribute* or *genus* in the *minor* premise, and consequently is taken particularly as the attribute of the *major* premise. But here the part of the attribute being determined by a smaller subject, "European," we have another identical proposition differing from the first only in this, namely, that it contains a smaller quantity, say $2=2$. Thus we have two propositions identical:

$$\begin{array}{r} 4=4 \\ 2=2 \end{array}$$

The middle term being taken *particularly* in the *minor* premise, cannot be what it was in the *major* premise where

it was taken *universally*; so that if we consider the quantitative value of the terms, either in each proposition separately, or in the two propositions jointly, we have two identical propositions, i.e. a syllogism in which the middle term $4+2$ is equal to the two extremes $4+2$, which means that there is no middle term nor any syllogism at all. In fact, as the attribute of the affirmative proposition must be taken particularly, the middle term can neither contain nor be contained, and consequently the fundamental principle of the syllogistic structure falls to the ground. When therefore, to justify the rule, an example is brought forward objectively and materially correct, its correctness is independent of the logical rule, and rests upon other grounds. That all men are really mortal, and that Europeans being men are also mortal—these and similar propositions are derived either from experimental or from metaphysical knowledge, and their truth and necessity are founded upon the *quality* and *nature* of terms, and nowise upon their *quantity*.

It will perhaps be said that to consider in Proposition and Syllogism the *quantity* only, and not to comprehend the *quality* therein, is to take a narrow and erroneous view of formal Logic; and that, in order to form a correct notion of the subject, one ought to embrace and combine both quantity and quality. Thus in the propositions, "Man is mortal," "The rose is red," &c., "mortal" and "red" ought to be considered with reference both to quantity and to quality; for with reference to *quantity* they constitute a *genus* which embraces the *species*, and with reference to *quality* they constitute a character or attribute *inherent* in the subject. Consequently, in syllogism the relations of the three terms must be considered not only with reference to their quantity, but to their quality also; so that, if we consider the middle term as a quality common to the extremes, we shall see that these latter must, as a consequence, be connected together; and thus the syllogistic theory will be justified.

That in terms and proposition the Quality should be taken into account, I am far from denying; indeed it is Quality which, in logical as well as in all other scientific researches, ought to be more carefully investigated and defined than quantity, as it is quality that comes the nearest to the very

essence of things; and it may be affirmed that had Logicians given a closer attention to the quality of logical laws and operations, they would have formed a different notion of Logic, and rested it on a broader and higher basis. But of this more fully hereafter. Here I will confine myself to pointing out the failures and inconsistencies brought to light by the consideration of quality in logical theories as they now stand. In fact, by contrasting quantity and quality as they are combined in proposition, we shall easily perceive that they are at variance and cannot be reconciled with each other. For, according to quantity, it is the subject that would be contained in the attribute; and according to quality, it is the attribute that would be contained in the subject. According to quantity, the attribute or genus would contain several subjects or species; according to quality, it is the subject or the species that would contain several attributes or genera: and in order to see the bearing of this inconsistency, and how far it vitiates the whole logical structure, let us throw a retrospective glance over its various parts, and examine them in their mutual relation.

It is plain that the syllogistic theory rests entirely on the theory of Terms. For, as I have shown, the combination of Terms in Proposition and the combination of Propositions in Syllogism is made according to the elementary constitution of Terms. Now, we are taught in the theory of Terms that these are constituted in such a manner as to form a sequence, a progression in which the lower and narrower term — the species — is contained in the higher and wider — the genus; which means, if it means anything, that the genus is superior to the species, and consequently that the genus, rather than the species, ought to be the principle of demonstration. But, contrary to our expectation, we find in Syllogism the species furnishing the middle term and playing the principal part. Why it should be so, is not stated. It may be said that the Species, being something *intermédiaire* between the individual, or the inferior species, and the genus, is the only term that can supply the middle term. But then the theory of Terms falls to the ground, and with the theory of Terms the theory of Syllogism, as a syllogism cannot be made up unless the Species is contained in the genus. This is not all. For

if, in a syllogism, taken singly, it is the species that stands higher than the genus, then we find that in a series of syllogisms it is the genus that retains the higher rank. Thus, when the species requires demonstration, it is the genus that is brought forward. For instance, supposing that the major premise of the syllogism,

All Europeans are mortal.

The French are Europeans, &c.,

should be demonstrated, the middle term of the new syllogism would be the genus; *all men*; and if we want to prove this second argument, we must bring forward some still higher genus—*all corporeal beings*, or *all created beings*, for instance. Thus in the theory of Terms the genus is superior to the species, in the theory of Syllogism it is sometimes subordinate and sometimes superior to the species; it is subordinate in a single syllogism and it resumes its former rank in a series of syllogisms: all this not according to any fixed rule or to rational Logic, but to the arbitrary proceedings and requirements of formal Logic.

To give another instance of the manner in which this science is dealt with in some of the most popular books, I will conclude these remarks by quoting a passage from Dr. Whately's Logic, which embodies, as it were, the common method of similar treatises. After having defined Logic as the science of *Reasoning*, and not of *Reason*—which means that Logic has nothing in common with Metaphysics—the author, when arrived at the theory of Terms, states that, amongst the terms, there are some which express the *Essence* of things. (Now, what is Metaphysics but the science which inquires into the essence of things?) Then he goes on to say that the term which expresses the *whole essence* is the Species, and that the *genus* and the *Differentia* express, the former the *material*, the latter the *formal* and *distinguishing* part of this essence; adding further that, in reality, it is not the *GENUS* that contains the Species but the *Species* that contains the *genus*, and that when the *Genus* is called a *whole*, and is said to contain the *Species*, this is only a *metaphorical expression* signifying that it comprehends the species in its more *extensive* signification; so that *man* is a more *full* and *complete* expression than *animal*, though less *extensive*

than *animal*: and the theory is wound up by saying that if *MAN* is more *full* and *complete* than the genus *animal*, the *individual* is, in its turn, more *full* and *complete* than the species *man*.* This passage shows how fallacious, inconsistent, and artificial, formal Logic is. For it is plain that if the *Individual* is more *full* and *complete* than the *Species* and the *Genus*, the *Individual* ought to be the principle of demonstration. But, then, what becomes of *Syllogism*, and of the *universal proposition* which is the *perfect form* of demonstration, nay, the only demonstration, and that upon which, as it were, turns the whole Logic? Besides, what mean the words that the *Genus* is the *material* part of the essence of things? In the Aristotelian theories these words have a meaning, whatever be the value of these theories. For, according to Aristotle, all things consist of *Matter* and *Form*, and the *Genus*, being more indeterminate than the *Species*, expresses the *Matter*. But these considerations belong to *Ontology* and *Metaphysics*, and those who distinguish between *Reason* and *Reasoning*, and pretend that Logic has no connection whatever with *Metaphysics*, are debarred from introducing these expressions and theories into the province of Logic. Again, if the *Genus* comprehends only *metaphorically* the *Species*, then the subject of the major and the subject of the minor premises will be also contained only metaphorically in their attributes, and thus *Syllogism* will become a combination of metaphors. But what is still more startling is to find first stated that the *Species* expresses the *whole essence*, and a few lines below that the *Individual* is more *full* and *complete* than the *Species*. Now, can anything be possibly conceived *more full* and *more complete* than the *whole essence*?

§ 2. *The Principle of Contradiction.*

As everthing must be identical to itself, and cannot be conceived to be other than, or contrary to, itself, it follows that every proposition or thought in accordance with this criterion is true, and every proposition or thought at variance with it is false. And, as a consequence of this principle, it is thought that there cannot be any intermediate term between

* See Whately's Logic, pp. 129-31.

two opposite attributes, and that one of them must be necessarily affirmed and the other necessarily denied of the same subject. Such is the famous principle of *contradiction*, and *exclusi tertii*, which Logic holds out as the supreme and absolute test of truth. Now, I do not hesitate to affirm that it is this principle which begets the most obstinate and inveterate errors, and sets up a barrier against a comprehensive and really rational knowledge. And here, too, we find Logic falling into the same inconsistencies we have met with in the theories we have just examined; for after having laid down the principle, Logicians lose sight of it, and set forth theories quite at variance with it. How can, for instance, the *theory of Division* be reconciled with the principle of contradiction, when we find, as a fundamental rule of Division, that the genus must be divided into *irreducible species*, i.e. species the attributes of which are repugnant to each other. For it is plain that the opposite species coëxist in the genus, and, therefore, that one and the same subject may involve opposite qualities. *White* and *black* coëxist in the genus *Color*, *rational* and *irrational* in the genus *Animal*; so that *Color*, *Animal*, &c., are the *tertium quid*, the medium comprehending the contradiction. In fact, I do not know of any principle more at variance either with experimental or with speculative knowledge than the principle of contradiction; and its being received as a criterion of truth can be explained only by its not being properly understood. Let us, then, define its meaning—the meaning which is, and the meaning which must be, attached to it.

A thing, it is said, cannot be other than itself; i.e. cannot possess any quality contrary to another quality; to which it is added, that it cannot possess it at the same time and in the same respect. Thus, if a thing is white it cannot be black, and if a body is light it cannot be heavy, at the same time and in the same relation. This is the construction generally put on the principle of contradiction, and in this sense I admit it is correct; but it must be added that it has no scientific bearing—nay, it is puerile. For no one in his right mind would contend that a thing is not white while it is white; that the light is not the light, or the shade is not the shade; but the question

is whether the contradiction is a necessary law of things, a necessary principle governing the whole as well as the parts, and without which neither the whole nor the parts could possibly exist. For it little matters to know that the living is living whilst it is living, or that such and such individual is living; the important and decisive point being to determine whether, besides life, there is death, and if death is equally necessary, equally beneficial, equally conducing to the beauty, strength and harmony of things. Again, it would be puerile to say that man is not laughing whilst he is laughing, or that he is not sleeping whilst he is sleeping; but here, too, the question is whether mere opposition coëxists and must coëxist in man.

This is the truly scientific and rational meaning of the principle of contradiction, and when viewed in this light the fallacy of the construction put upon it by formal Logic will become manifest. For it will be seen that identity and non-contradiction, far from being the test of truth, are the reverse of it; that difference, opposition, and contradiction, constitute the universal law of things, and that there is no being, nothing on earth or in heaven—to use the Hegelian expression—that escapes this law. In Nature all is opposition and strife, and no being can be observed or conceived—from the imperceptible and obscure insect that crawls upon the earth up to the vast masses that revolve in space—which could exist without the presence and *stimulus* of conflicting elements, tendencies, and forces. In Mathematics we have opposition in numbers, in lines, in planes, in solids—the opposition of unity and duality, of even and odd, of entire and fractional numbers—of straight and broken, of horizontal and perpendicular lines—of centre and circumference, &c. In Morals we meet with the opposition of liberty and law, of antagonistic tendencies and motives. In Metaphysics, and other provinces of thought, we find the opposition of cause and effect, of substance and accident, of infinite and finite, &c. Finally, man is, as it were, made up of elements the most conflicting—body and soul, joy and grief, love and hatred, smiles and tears, health and sickness, &c.; of all mortal beings, he is the one in whom the contradictions and the struggles are the most intense; and he who will cast a deep and impartial look

into the nature of the Universe will see that, far from the absence of contradiction constituting the fundamental law of things, the more comprehensive, multifarious, and intense, the contradiction in a being, the higher its nature, the fuller its life, beauty, and perfection.

§ 3. *Applied Logic.*

If the principles and rules laid down by formal Logic are, abstractly considered, arbitrary and fallacious, it is evident that they must be equally so when applied to other provinces of knowledge, and that in general they must beget confusion of ideas, false habits of thought—or pervert and curtail the natural and real notions of things. And to begin with the principle of contradiction, if, as I have demonstrated, the Universe is, so to speak, an aggregate of contradictions, Logic, which teaches that the principle of contradiction is the test of truth, must set the mind in opposition to the very nature of things. In fact, if this principle should hold good, we could say, “Man is a being possessing the faculty of *laughing*”; but it would be illogical to say, “Man is a being possessing the faculty of *weeping*.” And if in common things, and matters of fact, the contradiction is admitted in spite of and against the principle of contradiction, it must be borne in mind that it is not so in speculative questions, and in matters of a far higher importance, but remote from common use, and above the reach of general appreciation. For here, misled and blinded by this principle, we refuse to acknowledge the very contradiction which not only we have acknowledged in other instances, but with regard to which we should consider as not being in their right mind those who would not acknowledge it. And it does not require a great strain of thought to trace to this principle the origin of most of our erroneous opinions and theories. Thus, in political and social science all absolute theories are founded on the exclusion of contradiction. For if men be *equal*, and there is no *natural inequality* between them, it follows that the present organization of society, in which inequality is recognized and sanctioned, is against nature; and, consequently, those who claim equality of rights, a common level of power, of classes, and education, are the legitimate organs

of truth and nature. The opinion that absolute forms of government—either monarchical or democratic—are more perfect and rational than mixed, has no other foundation, all absolute forms excluding contradiction. Similar instances may be discovered in other branches of knowledge, in ethical, in physical and metaphysical sciences. Thus those who contend that man is a mere sensitive being, and that sensibility constitutes his whole nature, if consistent, will teach, in Ethics, that *Sensation* and *Pleasure* are the only principle and criterion of morals; as, on the contrary, those who contend that what they call Reason constitutes man, will hold out *Duty* and *Good* as the only legitimate motives of action. Again, in Metaphysics, those who hold that man is *absolutely free*, and those who hold the opposite doctrine, namely, that *necessity* is the universal law of things, both rest their doctrine on the principle of contradiction. In short, were we to admit this principle, we should, if consistent, either mutilate the nature of things,—suppress, as it were, the half of the universe, and substitute arbitrary, narrow, and distorted notions for comprehensive and concrete reality, or evade the difficulty by inconsistencies or by mere verbal contrivances: for instance, that the straight and the broken lines may be considered as identical, their difference being so small that it may not be taken into account; or that the unity can be neither multiplied nor divided, and then making up the sum or the fractional number of unities, or parts of unities, added or divided; or that shade and cold are not realities, but mere privations of light and heat, as though privation could exist without the real principle that produces it; or that the Absolute is free from all contradictions, holding, at the same time, that God is merciful and stern in his justice—that he is the God of peace, and the God of war—that He is the principle of life, and the principle of death—that He is absolutely free, and the absolute and immutable law;—thus admitting and denying at the same time the very same thing we have denied or admitted in other instances and in another form, and throwing thereby all thought and knowledge into the most inextricable confusion. So much for the present on the principle of contradiction.

Let us now examine the value of logical theories in

their application either to experimental or to speculative science.

With regard to the first, it will be easily seen that it is only by a surreptitious process, and by giving to its principles a higher bearing than they intrinsically possess—in fact, by overstepping its own boundaries—that Logic pretends to bring about experimental knowledge. For we have, on the one hand, the universal proposition laid down as the necessary condition of all demonstrative and strictly scientific knowledge, and on the other we have facts, individuals, single and isolated phenomena. If, then, the universal proposition (whether it be the conclusion as in the *inductive*, or the major premise as in the *deductive* argument) is considered as a mere *form* of thought, as a form having no objective or any consubstantial relation to the thing to be demonstrated, logical argument, when applied to experience, is nothing but a delusion. If between man as *individual* and man as a *species* there is only a subjective and formal connection, when I pretend to prove that *such a man* is really mortal because *all men* are mortal, or that *all men* are mortal because of *such and such a man* being mortal, I am only connecting together words or forms which do not affect in any way the nature of the thing I demonstrate, and consequently in reality and objectively I prove nothing. The argument, therefore, cannot be really conclusive, unless it be admitted that between the *individual* and the *universal*, the *fact* and the *principle*, there is a community of nature, an objective and consubstantial connection—a connection similar to that of *cause* and *effect*, of *substance* and *accidency*. But such a connection is beyond and above the reach of formal Logic—nay, it is the very connection that formal Logic expressly disclaims, as we have already noticed, and shall see more fully hereafter.

Passing now from inductive to deductive argument, and from experimental to metaphysical knowledge, we shall find here also Logic falling short of what it promises to accomplish, namely, to establish truth and principles by a correct and rational demonstration.

The supreme object of Metaphysics is, strictly speaking, the knowledge of the Absolute; and the Absolute, for the very reason that it is the Absolute, is the ultimate and most

evident principle of demonstration. This is the meaning of the expressions, “*God is the light of intellect; He is the Ideal of the Universe, the Thought, and the Being*, and that *nothing can exist or be conceived without Him*.” Now, all these and similar definitions of the Absolute necessarily imply the idea that the Absolute is also the absolute principle of demonstration, or, to use the more popular expression, that God is the Foundation of all demonstration. But it is not so with formal Logic; for were we to follow the rules laid down by it, the Absolute would be of no avail in syllogism and demonstration. In fact, the part the Absolute could fulfil in a syllogism would be either the part of minor or the part of major term, or that of middle term, or that of two of them. This is the circle of supposition we can form with regard to the Absolute. Now, it is evident that the Absolute cannot be the *minor* term, as the minor term is always demonstrated, and the Absolute is supposed to demonstrate and not to be demonstrated. Nor could it be the *major* term, as the major term is not the *middle* term; and it is the middle term that plays the highest part in syllogism. Nor is the *middle term* any better; for the middle term being the species, is contained in the genus and is inferior to it: so that neither the major term for not being the species or the middle term, nor the middle term for not being the genus or the major term, can constitute the absolute term of demonstration. It only remains, then, that the Absolute should be the union of both terms—of the species and the genus, or of the middle and major terms—so that when we say, for instance, *God or the Absolute is the Perfect Being, or possesses all perfections*, “God” and “all perfections” should be so intimately and so inseparably connected that one could neither exist nor be conceived without the other. But this supposition must likewise be rejected. In fact, are the two terms of the proposition absolutely identical? then there is in reality only one term, and their distinction is only a verbal one. Are they really and materially distinct? then, if united, their union must be effected by a third term, which, for the very reason that it unites them, would be superior to them, and in this case neither of them, but this third term would be the absolute.

Besides, in all propositions concerning the Absolute, the distinction or division into genus and species must be done away with as not being applicable to this province of knowledge. For instance, in the proposition, "The eternal and imperishable things are the principle of the temporary and perishable," which of the two terms would be the species, and which the genus? Shall we say that *temporary things* constitute the genus of the *eternal*? But this would be simply absurd. Shall we say, then, that it is the *eternal things* that constitute the genus of the *temporary*? But this would be in opposition to the fundamental rule of Logic, that the subject of a proposition should be the species, and the attribute the genus.

Finally, whether absolute propositions like these, "The Absolute Being is the source of all perfection," or "The Absolute Cause is the principle of all things," or "The Beautiful and the Good are the principle of all beauty and all good"—whether, I say, all these and the like propositions consist of genus and species or not, whether their terms be identical or different, they cannot supply the principle—the *propositio major*—of any demonstration, as it may be easily ascertained by trying to combine them in syllogism.*

The point the above remarks establish is that formal Logic cannot be reconciled with the principles which constitute the foundation—the *major principle* of all demonstration, and that no legitimate conclusion can be drawn from them.

If, now, we take up the counterpart of the question, or, so to speak, the question by the other end—by the conclusion—and show that no metaphysical knowledge or principle can

* It may be said that the following argument—

The absolute cause is the principle of all things.

God is the absolute cause:

Therefore God is the principle of all things—

is *logically* and *formally* correct. But in reality it is no argument at all; nay, it is at variance with the rules of Logic itself. For—even granted that the terms "God" and "absolute cause" be distinct, inasmuch as *Causality* may be considered as an *attribute of God—absolute cause*, which is an attribute of God, could not be the *middle term* or the principle of demonstration, and God the *minor term* and that part of the proposition which is demonstrated. Rather the reverse would be the case; I mean that it is the *propositio minor* that ought to take the place of the *propositio major*. But, then, from a *propositio major* like this, "God is the absolute cause," no conclusion can be drawn.

be obtained through syllogism (in the conclusion), we shall complete the demonstration.

It has already been observed that all attempts to prove by syllogism, and on *à priori* argument—which, strictly speaking, is the only metaphysical and speculative demonstration*—the existence of God, have failed. The reason of this failure is very simple. Neither God, nor anything—attribute or perfection—appertaining to God, can be syllogistically demonstrated. For God, being the Absolute, demonstrates all, and is demonstrated by nothing; consequently, the Existence or the Being of God, who is *the Being*, cannot be demonstrated by any other Being; in other words, there cannot possibly be any middle term, or principle, by which God, or God's nature, could be demonstrated; for a principle demonstrating God would be something more perfect and higher than God, and thus God would not be the Absolute principle of demonstration. Thus all proofs of this kind are either mere verbal contrivances or circles, as may be ascertained by analyzing the famous argument drawn from the idea of the *Infinite of Perfect Being* when presented in the syllogistic form. And, to place the matter beyond doubt, let us examine this argument, upon which, as Kant has already observed, hang all *speculative* proofs and certainty of the existence of God.

The point to be demonstrated is the *Existence of God*, and the gist of the proof, nay, the whole proof, rests on the Idea of the *Infinite* or the *Perfect Being*. For it is out of this Idea and by analytical process that the three terms of the argument must be evolved. Now it may be seen at a glance, as it were, that a syllogism so constituted can be but a circle.

* The really Metaphysical and Speculative proofs of the Existence of God are those deduced from a primordial and *pure* idea—the idea of the Infinite, of the Absolute, of the Perfect Being, &c.—considered in itself and apart from all experimental *data*. Inductive arguments, as for instance those known under the name of *physical proofs*, are not strictly demonstrative. Indeed they presuppose the Metaphysical proof, and the absolute notion upon which this proof is founded. In fact, from the apprehension of finite causes or effects, or of the beauty, proportion and harmony of the Universe, it would be impossible for us to raise our mind to the contemplation of an *Absolute Cause*, of an *Absolute Finality*, &c., were it not that these notions preexist in the mind, and are—consciously or unconsciously—suggested by it.

In fact, in affirming the *Infinite*, either we affirm a *Reality*, a *Real Being*, or a mere subjective representation, a certain form of thought possessing no objective entity, no being corresponding to it. In the latter case there is no syllogism at all, for there is no more connection between the *real existence* of God and the *Idea* of the Infinite than between bear the animal and Bear the constellation: If, on the other hand, in affirming the Infinite we affirm a Reality, we affirm thereby the existence of the Infinite, or of the Infinite Being, and in this case the conclusion is contained, not virtually or implicitly, but actually and explicitly, in the major premise. In fact, when we state in the major premise that the "Infinite is the Being that possesses all perfections," we admit—and cannot but admit—at the same time, that the Infinite exists, otherwise there would be no meaning in the proposition.*

This completes the demonstration; for it shows that Logic is, so to speak, refused admittance into the domain of Metaphysics by both ends of the argument, namely, by the major premise and by the conclusion. By the major premise, from its being unable to avail itself of the Absolute as a principle of demonstration, as I have shown in the first instance; by

* The argument is this:

The Infinite or the Perfect Being must possess all perfections.

The Existence is a perfection:

Therefore the Perfect Being exists, or the Existence belongs to the Perfect Being.

It will be observed that this syllogism is fallacious and *inconclusive* even according to the rules laid down by Logic, or according to the rational combination of terms; for it is a Syllogism of the 2d Figure with two *affirmative* premises, whilst we are taught that one of them must be negative. Now, even granted that in this particular case the two premises might, by exception, be affirmative, the conclusion could not be legitimately drawn from them; for the conclusion would be either, "The Perfect Being exists," or "The Existence belongs to the Perfect Being." In the first case, the subject of the conclusion would be the *Major extreme*, whilst it ought to be the *Minor extreme*; in the second case, it is only by inverting the natural position of terms, and putting language and thought to torture, that the conclusion would be obtained. For if the Existence be a perfection or an attribute of God, it must fill the place of the attribute and not that of the subject.

The remarks contained in this note and text equally apply to all *speculative proofs* of the existence and attributes of God—nay, to all argument which attempts to demonstrate the absolute, the ideas, and essence of things.

the conclusion, as it is unable to demonstrate the Absolute, as I have shown in the second instance.

§ 4. *Reason and Reasoning.*

This impotency of old Logic to reach Metaphysical knowledge has brought out the well-known and fallacious distinction between Reason and Reasoning. Unable to remodel Logic, in order to make it available in the highest field of scientific research, and feeling, at the same time, that there must be some connection between this universal organon of knowledge and metaphysical science, some philosophers, to solve the difficulty, have resorted to the above distinction, setting forth that there is the same connection and the same difference between Metaphysics and Logic as between the principle and the consequence, between affirming a principle and deducing consequences therefrom. Metaphysics, according to this opinion, inquiring into the absolute principle and ultimate causes of things, whilst Logic deduces consequences by applying them to secondary causes or effects and to particular objects.

The preceding investigation would suffice to show how clumsy and inadmissible this opinion is, as they establish irreversibly, I think, that not only Metaphysics and Logic—as this latter stands at present—are two distinct provinces of knowledge, but that they are irreconcilable; and, consequently, that this deduction of consequences by Logic out of Metaphysical principles is a bare assumption—nay, a mere delusion. However, in order to place this latter point in a more prominent light, let us grant, for a moment, that it may be so, and that we have here two sciences, one of which supplies the principles, and the other the consequences—the former being the product of a faculty called *Reason*, and the latter of a faculty called *Reasoning*.

Now if this theory possess any meaning, it means this, namely, that in syllogism *Reason* suggests the *major* premise, and *Reasoning* the *minor* premise as well as the relation of the latter to the former, from the perception of which relation it brings forth the conclusion. But then the *Reasoning faculty* would stand higher than *Reason*, and perform opera-

tions more important and more complete than the latter, which is contradictory to and against the supposition. For we suppose—and must admit—that the faculty which reveals to us the ultimate principle of things is the $\tau\circ\ \eta\gamma\mu\omega\nu\chi\kappa\circ\nu$ —the governing power to which all other faculties stand subordinate, as the soldier is subordinate to the general and the menial laborer to the architect. Now the above distinction inverts, so to speak, the rules, and sets forth Reason as a subordinate faculty. In fact, when we say that Reason propounds the principles and Reasoning deduces the consequences therefrom, we say, in reality, that the knowledge of Reason, or obtained through it, is confined to principles and forbidden to overstep these boundaries, whilst Reasoning embraces both principles and consequences. For, to deduce consequences from principles, the Reasoning faculty must apprehend both, and the principles more distinctly than the consequences and previous to them, as the latter are drawn from the former. Let us consider a syllogism.

All virtue comes from God.

Justice is a virtue:

Therefore, &c.

It is quite plain that all the terms and propositions as well as their relation must be perceived by one and the same faculty. Were they perceived by different faculties, one of which stops, as it were, at the major premise, whilst the other takes up the operation at the minor premise, without perceiving the principle as distinctly as the first faculty—nay, more distinctly, from the very fact that it draws inferences from it—the argument could never be made up. And the correctness of these remarks will become more manifest if we take the three terms of which syllogism consists and put them in this form,

A B C,

A being the minor, C the major, and B the middle term. For it will be seen that B, whose function it is to connect A and C, must be apprehended by one and the same faculty. But the B of which C is affirmed in the major proposition, is the same B which is affirmed of A in the minor. Consequently, it must be the same faculty that brings forth and affirms B in the two propositions. Again, the C of the major proposi-

tion is the C of the conclusion, and here also we have the same faculty perceiving C in both propositions. Lastly, if it be one and the same faculty which affirms B and C in the three propositions, it must necessarily be one and the same faculty that affirms B and C of A in the minor premise and in the conclusion. In other words, syllogism is a mental operation by which the connection of three terms is demonstrated. Now, even supposing that the performing of such operation should require the working of different faculties—that there should be, for instance, a faculty which supplies the terms and another faculty which supplies the propositions—there must be, at any rate, a superior and more comprehensive faculty by which all these elements—faculties, terms, and propositions—are connected together in the unity of syllogism. Hence it follows that the distinction between Reason and Reasoning which is to be the line of demarcation between Metaphysics and Logic vanishes before a close investigation of the matter, and consequently that either Metaphysics is a part of Logic or Logic a part of Metaphysics, or, if there be any distinction between them, it is a distinction of a different kind and founded upon other principles.

H A M L E T.

By D. J. SNIDER.

In our last essay the external influences were detailed the object of which was to incite Hamlet to action. In them was seen the character of Hamlet reflected in a great variety of shapes, yet having always the same logical basis. Here is found undoubtedly the leading element of the play. But to this action there is a counter-action which must now be developed. We saw in the first great movement that Hamlet's obstacle was chiefly in himself, that he could not force himself to do the deed, though the most powerful impulsion from without was urging him forward. Now comes the external opposition, which seems trifling compared with the former. The King and the court are upon his track, yet how easily